

REMARKS

In the Office Action dated April 17, 2003, claim 7 was rejected under 35 U.S.C. § 112, ¶ 1; claims 1, 3, 9, 11-13, 20-22, 26, 27, and 30 were rejected under § 102 over U.S. Patent No. 5,933,781 (Willenegger); claim 2 was rejected under § 103 over Willenegger in view of U.S. Patent 6,438,119 (Kim); claims 4, 5, 28, 29, and 31-33 were rejected under § 103 over Willenegger in view of U.S. Patent 5,727,033 (Weaver); claim 6 was rejected under § 103 over Willenegger in view of U.S. Patent No. 6,208,699 (Chen); claims 8 and 10 were rejected under § 103 over Willenegger in view of U.S. Patent No. 5,933,782 (Nakano); claim 14 was rejected under § 103 over Willenegger in view of U.S. Patent No. 6,463,042 (Paatelma); claim 15 was rejected under § 103 over Willenegger in view of U.S. Patent No. 6,286,122 (Alanara); claim 16 was rejected under § 103 over Willenegger in view of Alanara in further view of U.S. Patent No. 6,490,268 (Lee); claim 19 was rejected under § 103 over Willenegger in view of Alanara in further view of Lee and U.S. Patent No. 5,884,187 (Ziv); claims 17 and 18 were rejected under § 103 over Willenegger in view of Alanara in further view of U.S. Patent No. 5,812,938 (Gilhousen); claim 23 was rejected under § 103 over Willenegger in view of Chen; claims 24 and 25 were rejected under § 103 over Willenegger in view of Lee; and claims 34-36 were rejected under § 103 over Willenegger in view of Weaver in further view of Alanara.

REJECTIONS UNDER 35 U.S.C. § 112, ¶ 1

The word "samples" has been added to the description on page 9 (*see* amendment of the paragraph starting at page 9, line 8, above). Since claim 7 is part of the original disclosure, no new matter has been added. With the amendment of page 9, it is respectfully submitted that claim 7 is supported by the written description. Withdrawal of the § 112 rejection is respectfully requested.

REJECTIONS UNDER 35 U.S.C. §§ 102 AND 103

Claim 1 has been cancelled to render the rejection of that claim moot. Claim 4 has been amended into independent form. The Office Action rejected claim 4 as being obvious over the alleged combination of Willenegger and Weaver. Claim 4, as amended,

recites adjusting a target ratio of energy per bit to noise spectral density based on detected error in control signaling that is transmitted over a link between a base station and a mobile unit when traffic channels are not being communicated. As conceded in the Office Action, Willenegger is silent on "adjusting a ratio of energy per bit to noise spectral density." 4/17/03 Office Action at 5. Instead, the Office Action relied on Weaver as allegedly disclosing this missing element, citing to column 3, lines 64-67 of Weaver. The passage at column 3, lines 64-67, of Weaver describes an inner control loop that detects the Eb/No of propagated *voice* data and adjusts the power output level of a reverse link transmitter 102 to increase or decrease the Eb/No of propagated voice data to match an Eb/No target 214. This passage of Weaver fails to disclose adjusting a target ratio of energy per bit to noise spectral density *based on detected error in control signaling*. What Weaver teaches is adjustment of a target Eb/No based on errors in propagated *voice* data, not control signaling. Weaver, 3:46-48. Therefore, even if Willenegger and Weaver can be properly combined (which they cannot), the alleged combination fails to disclose or suggest at least one element of claim 4. For this reason alone, a *prima facie* obviousness rejection has not been established with respect to claim 4.

Moreover, it is improper to combine the teachings of Willenegger and Weaver, particularly because Willenegger teaches away from the solution taught by Weaver. In the background section of Weaver, a discussion is made of performing power control using a frame error rate, which is the number of frame errors divided by the total number of frames observed. Weaver, 1:28-32. Because of perceived problems of using frame error rate to perform power control, Weaver proposes power control based on symbol errors. As explained by Weaver, each frame of data transmitted by a mobile system includes a plurality of symbols. Weaver, 2:9-11. Since symbol errors are detected prior to error correction of the data in a frame, Weaver states that the quantity of symbol errors is significantly higher than the number of frame errors, which allows a given confidence level to be achieved faster with symbol error rate based control than with frame error rate control. Weaver, 2:11-17. Thus, the two types of power control disclosed by Weaver (power control based on frame error rate and power control based on symbol error rate) both rely on detecting errors in transmitted voice data carried in frames. Willenegger

teaches away from this solution. As stated by Willenegger, by generating power control command based on the energy of a pilot channel, rather than the traffic channel, a more accurate power control command is generated because the pilot channel is transmitted with a relatively constant or slow changing transmit power. Willenegger, 6:17-21. As further explained by Willenegger, when traffic signaling is not transmitted, the base station generates incorrect power control increase commands because the reverse link signal is not detected. Willenegger, 2:8-12.

Therefore, because Willenegger teaches away from the solution sought to be achieved by Weaver, the two references cannot properly be combined, since there is no motivation or suggestion to combine these references. For the reasons above, claim 4 is clearly allowable over the alleged combination of Willenegger and Weaver. Independent claim 33 is similarly allowable over the alleged combination of Willenegger and Weaver since the combination fails to disclose or suggest adjusting a ratio of energy per bit to noise spectral density based on monitored one or more errors in the predetermined pilot signal information.

Independent claims 20 and 30, as amended, are also allowable over the cited references.

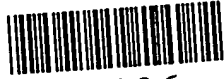
Several other combinations of references have been asserted against some of the dependent claims. Such other rejections have either been rendered moot or have been overcome by the amendments and arguments presented in this Reply. Applicant specifically notes that Applicant does not admit that the other combinations of references to reject claims under 35 U.S.C. § 103 are proper. Applicant reserves the right to argue that the asserted combinations of references are improper, should such combinations be repeated in a future Office Action.

In view of the foregoing, all claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0031US).

Respectfully submitted,

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Date



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PATENT TRADEMARK OFFICE

A handwritten signature in black ink, appearing to read 'Dan C. Hu', written over a horizontal line.

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